

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for curing or drying of a surface-coating layer or of a printing ink, comprising adding to a surface-coating composition or printing ink in an amount of 0.1-5 % 0.1-4 % by weight based on the surface-coating composition or the printing ink one or more pale or transparent particulate semiconductor materials or one or more particulate substrates coated with one or more pale or transparent semiconductor materials, wherein the one or more semiconductor materials absorb in the IR region, applying to a surface the ink or the surface-coating composition to form a surface-coating layer and curing or drying the surface-coating layer or ink by IR radiation, with the proviso that the one or more semiconductor materials are not indium-tin oxide (ITO).
2. (Previously Presented) A method according to Claim 1, wherein the one or more pale or transparent particulate semiconductor materials are homogeneous in structure or the one or more pale or transparent semiconductor materials are applied as a coating to a particulate substrate.
3. (Previously Presented) A method according to Claim 1, wherein the particulate semiconductor materials or the particulate substrates are spherical, flake-form or needle-shaped.
4. (Previously Presented) A method according to Claim 1, wherein the semiconductor material is built up oxidically or sulfidically.
5. (Cancelled)
6. (Cancelled)
7. (Previously Presented) A method according to Claim 1, wherein the substrate is selected from the group consisting of mica flakes, SiO_2 flakes, Al_2O_3 flakes, glass

flakes, aluminium flakes, BiOCl flakes, SiO₂ spheres, glass spheres, hollow glass spheres, TiO₂ spheres, polymer spheres, TiO₂ needles and mixtures thereof.

8. (Previously Presented) A method according to Claim 1, wherein the semiconductor materials are doped.

9. (Previously Presented) A method according to Claim 1, wherein the semiconductor has an amorphous, crystalline or microcrystalline structure.

10. (Cancelled)

11. (Currently Amended) A surface coating or printing ink composition, comprising in an amount of 0.1-5 % 0.1-4 % by weight based on the coating or printing ink composition one or more pale or transparent particulate semiconductor materials or particulate substrates coated with pale or transparent semiconductor materials, wherein the one or more semiconductor materials absorb in the IR region, and one or more carriers to form the surface coating or printing ink composition, with the proviso that the one or more semiconductor materials are not indium-tin oxide (ITO).

12. (Cancelled)

13. (Cancelled)

14. (Previously Presented) A method according to claim 1, wherein the coating layer is an automobile paint.

15. (Previously Presented) A method according to claim 1, wherein the curing or drying of a surface-coating layer is achieved.

16. (Previously Presented) A method according to claim 1, wherein the curing or drying of a printing ink is achieved.

17. (Currently Amended) A method according to claim 1, which is for shortening the curing and/or drying time of a surface-coating layer or printing ink, comprising adding to a surface-coating composition or the printing ink in an amount of 0.1-5 % 0.1-4 % by weight based on the surface-coating composition or the printing ink one or more pale or transparent particulate semiconductor materials or one or more particulate substrates coated with one or more pale or transparent semiconductor materials to shorten the curing or drying time of the surface-coating layer or printing ink by about 10-60% in comparison to the curing or drying time of the surface-coating layer or printing ink without the one or more pale or transparent particulate semiconductor materials or one or more particulate substrates coated with one or more pale or transparent semiconductor materials, applying to a surface the ink or the surface-coating composition to form a surface-coating layer and curing or drying the surface-coating layer or ink.

18. (Cancelled)

19. (Previously Presented) A method according to claim 17, wherein the curing or drying of a surface-coating layer is achieved.

20. (Previously Presented) A method according to claim 17, wherein the curing or drying of a printing ink is achieved.

21. (Currently Amended) A method for curing or drying of a surface-coating layer or of a printing ink, comprising applying to a surface an ink or a surface-coating composition to form a surface-coating layer and curing or drying the surface-coating layer or ink by IR radiation, wherein to the surface-coating composition or printing ink in an amount of 0.1-5 % 0.1-4 % by weight based on the surface-coating composition or the printing ink one or more pale or transparent particulate semiconductor materials or one or more particulate substrates coated with one or more pale or transparent semiconductor materials have been added, wherein the one or more semiconductor materials absorb in the IR region, with the proviso that the one or more semiconductor materials are not indium-tin oxide (ITO).

22. (New) A method according to claim 1, wherein the one or more semiconductor materials have a powder resistance of $< 20 \Omega \cdot m$.

23. (New) A method according to claim 1, wherein the one or more semiconductor materials have a powder resistance of $< 5 \Omega \cdot m$.

24. (New) A method according to claim 1, wherein the one or more semiconductor materials comprise tin oxide doped with antimony oxide or a substrate coated therewith.

25. (New) A method according to claim 1, wherein the one or more semiconductor materials consist essentially of tin oxide doped with antimony oxide or a substrate coated therewith.

26. (New) A method according to claim 1, wherein the one or more semiconductor materials consist of tin oxide doped with antimony oxide or a substrate coated therewith.

27. (New) A method according to claim 1, wherein the substrate is mica flakes or spherical SiO_2 particles.

28. (New) A method according to claim 1, wherein the one or more semiconductor materials are doped with antimony, antimony oxide or with a halide.

29. (New) A solvent-containing or aqueous printing ink or surface-coating system, a thermally curing solvent- or water-based surface coatings, IR coating, powder coating, melt coating, film application or plastic welding, which comprises antimony oxide doped tin oxide having a particle size of 0.5 to 30 μm .

30. (New) A method according to Claim 1, wherein the one or more particulate substrates coated with one or more pale or transparent semiconductor materials have been obtained by the particulate substrates having been coated by hydrolysis of the

corresponding metal salts in an aqueous or solvent solution.

31. (New) A method according to Claim 1, which comprises adding to a surface-coating composition or printing ink in an amount of 0.1-4 % by weight based on the surface-coating composition or the printing ink one or more pale or transparent particulate semiconductor materials or one or more particulate substrates coated with one or more pale or transparent semiconductor materials.

32. (New) A surface coating or printing ink composition according to claim 11, wherein the one or more semiconductor materials comprise tin oxide doped with antimony oxide or a substrate coated therewith.

33. (New) A surface coating or printing ink composition according to claim 11, wherein the one or more semiconductor materials consist essentially of tin oxide doped with antimony oxide or a substrate coated therewith.

34. (New) A surface coating or printing ink composition according to claim 11, wherein the one or more semiconductor materials consist of tin oxide doped with antimony oxide or a substrate coated therewith.

35. (New) A method according to claim 21, wherein the one or more semiconductor materials comprise tin oxide doped with antimony oxide or a substrate coated therewith.

36. (New) A method according to claim 21, wherein the one or more semiconductor materials consist essentially of tin oxide doped with antimony oxide or a substrate coated therewith.

37. (New) A method according to claim 21, wherein the one or more semiconductor materials consist of tin oxide doped with antimony oxide or a substrate coated therewith.

38. (New) A method according to claim 1, wherein the one or more semiconductor materials comprise antimony oxide doped tin oxide having a particle size of 0.5 to 30 μm .

39. (New) A method according to claim 21, wherein the one or more semiconductor materials comprise antimony oxide doped tin oxide having a particle size of 0.5 to 30 μm .

40. (New) A surface coating or printing ink composition according to claim 11, wherein the one or more semiconductor materials comprise antimony oxide doped tin oxide having a particle size of 0.5 to 30 μm .